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54 Impact sensitive high temperature detonator.

57 An impact sensitive detonator, particularly suitable for the initiation of explosive charges in oil wells, comprises a cylindrical casing (10, 110) closed at one end and open at the other end, the closed end having a thin striking surface (22, 122) which deforms without rupture when struck by a rounded firing pin (60). The casing contains a primary explosive charge (50) preferably lead azide, adjacent to the closed end, a mass of finely divided refractory material (52), for example silicon carbide adjacent to the primary explosive charge and an impact member (40, 140), extending transversely across the casing and forming with the casing a confined space for the primary explosive charge and the refractory material. the refractory material and the impact member aid the initiation of the primary explosive charge. Optionally a second charge of primary explosive may be placed on the output side of the impact member. Preferred forms of the detonator contain an output charge (56) of high explosive, for example, hexanitrostilbene between the impact member and the open end of the casing.

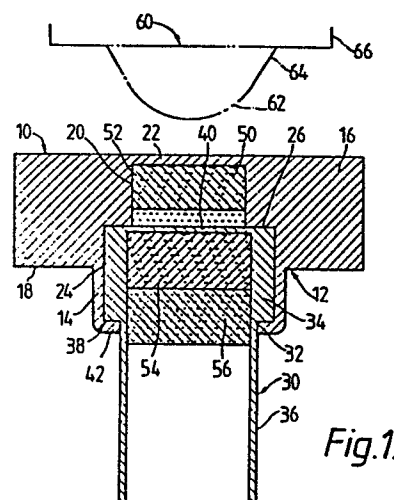


Fig.1.



| DOCUMENTS CONSIDERED TO BE RELEVANT | | | | | | | |
|--|--|--|--|-----------------------------|--|---|--|
| Category | Citation of document with indication, where appropriate of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl. 3) | | | | |
| Y | US-A-3 610 151 (NETT) * Column 1, last paragraph; column 2, lines 1-25; figure * | 1, 5, 8, 10 | F 42 C 19/10 C 06 C 7/00 | | | | |
| Y | FR-A-1 449 432 (DYNAMIT NOBEL AG) * Page 1, right-hand column, last paragraph; page 2, paragraph 1; figures 1a, 2a * | 1, 5, 8, 10 | | | | | |
| A | US-A-3 638 572 (MENICHELLI) * Abstract; column 2, last paragraph; column 3, lines 1-19; figure * | 1, 3, 9-11 | | | | | |
| A | US-A-3 306 201 (NODDIN) * Column 5, line 35 - column 6, line 48 * | 3, 9 | TECHNICAL FIELDS SEARCHED (Int. Cl. 3) F 42 C C 06 C | | | | |
| A | GB-A-1 314 203 (DYNAMIT NOBEL AG) | | | | | | |
| A | DE-B-1 278 288 (STADLER) | | | | | | |
| A | US-A-2 868 128 (RAMSEY) | | | | | | |
| The present search report has been drawn up for all claims | | | | | | | |
| Place of search THE HAGUE | | Date of completion of the search 05-06-1985 | Examiner RODOLAUSSE P.E.C.C. | | | | |
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